Building a Drying Rack for Fruits and Vegetables

Edgar W. Cooley, 1918

Selected pages from Home Drying of Fruits and Vegetables.

Drawings show a drying frame, removable trays and a rope harness for hanging the rack above a stove.

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all products can be partly restored, many of them to nearly their original condition.

The housewife who takes vegetables fresh from the garden and follows directions, being careful not to use too much heat in drying, will find, when she restores the dried product, that she has preserved all the taste and nutrition originally contained in the green vegetables.

Some of the points in drying cannot be explained—they can be learned only by doing the work yourself. But do not be confused or discouraged by this for the process is very simple and it will be a matter of surprise to you how easily it can be done and the different conditions overcome.

The products that can be dried are almost innumerable. The list embraces everything from the garden and orchard, including tomatoes, watermelons, and cantaloupes. It includes such highly perishable products as eggs, cream, cottage cheese and lean meats.

Expensive Equipment Not Necessary

The equipment for drying is as simple as the method. It consists of three frames such as any boy can make, any kind of a cook stove: a pot or pan or a tin bucket: a wire basket, or a flour sack, or even a piece of cheese cloth that can be fashioned into the shape of a bag by bringing the four corners together: a few pie pans, some dinner plates and an earthenware dish or jar.

Each of the frames should be about 27 inches long, 14 inches wide and 1½ inches deep. The sides and ends can be made of wood, and the bottom should be of galvanized window screen wire, fastened with double pointed tacks. The rack and harness shown in the cut were made by an eight-year old boy and what a young boy can do, anyone can do.

The heat from the stove goes up readily from the center and if the racks are too long, the product in the ends will not dry as



Two pounds of cottage cheese before drying; after drying weighs six ounces

rapidly as the rest. Just make the rack to fit the stove.

We must keep the racks clean. If they are any wider than 14 inches they cannot be placed in an ordinary dishpan. When you are through using the racks hang them on a nail in the pantry.

How to Make a Drying Rack

Get two pieces of small sized rope, or window weight cord, each six feet long. Tie the ends of each piece together, making two loops, each exactly 30 inches long. (Figure 2.) Place one loop around one end of the frame; the other loop around the other end (Figure 4). Bring the upper ends of the loops together and fasten them with a third loop, or doubled rope, sufficiently long to reach from a few feet above the stove to a firm hook in the ceiling (Figure 3). Near each end of a block of wood 8 inches long and 1½ inches wide, bore a hole large enough to let the doubled rope pass through easily. Pass the end of the upright rope through one hole and shove the block down to the junction of the two loops (Figure 3). Tie a knot in the upright rope to keep the lower end of the block from slipping up; then pass the double rope through the upper hole in the block (Figure 1). Place the upper end of the upright loop over the hook in the ceiling.

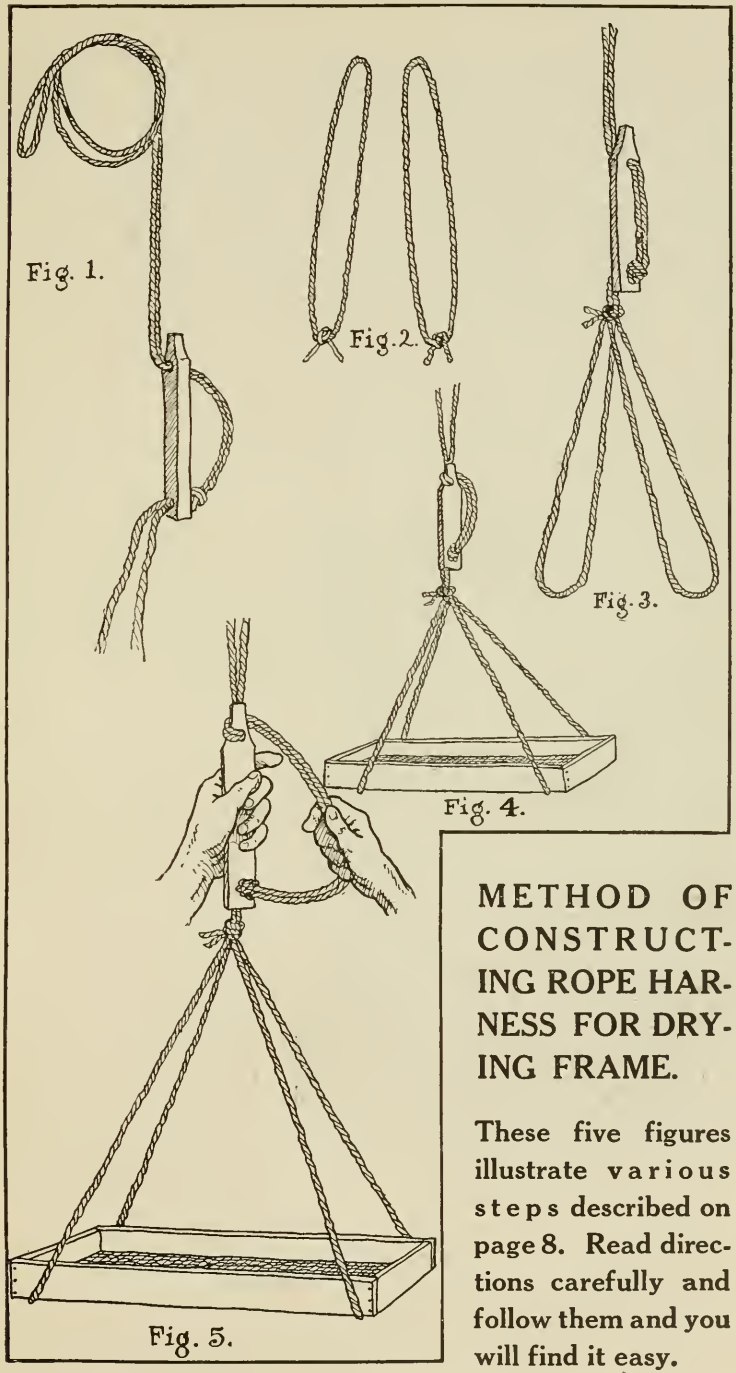
The purpose of the block of wood is to make it easy to adjust the height of the frame. To raise the frame, pull the rope through the upper hole in the block until the desired height is reached, then fasten the frame in place by looping the "slack" of the rope around the upper end of the block as shown in Figure 5.

Place two loops of rope, each about 20 inches long, around the suspended frame, one loop at each end, and let them hang down. In the lower ends of these loops, place the second frame and suspend the third frame from the second in the same manner as shown in cut on page 10.

Three Frames Save Time and Fuel

By using three frames the housewife will be able to save both time and fuel in drying a quantity of vegetables. For instance if she is drying peas, she can prepare enough to fill one frame and let them be drying while shelling, blanching and cold dipping another batch. When the second frame is spread with peas, those placed in the first frame will have been drying for about 25 minutes. This frame can then be raised until the second frame, suspended from it, is the same distance above the stove the first frame had been. When the third frame of peas are ready to dry, the second will have been drying about 25 minutes and the first about 50 minutes, but more slowly. Frames 1 and 2 are again raised until No. 3 is suspended the right distance from the stove.

When the peas in the third frame are sufficiently dried, those in the second frame, which have been drying for 25 minutes longer



METHOD OF CONSTRUCTING ROPE HARNESS FOR DRYING FRAME.

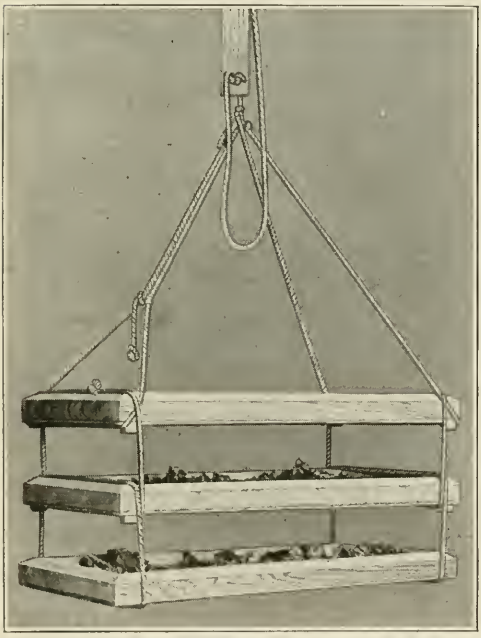
These five figures illustrate various steps described on page 8. Read directions carefully and follow them and you will find it easy.

but the most of the time at a lower temperature, and those in the first frame, which have been drying 50 minutes longer but at a still lower temperature, will have been dried to about the same extent. All the frames can then be removed and emptied and the process begun over again. Never start the three racks to drying at the same time.

In drying products no iron bound rule can be followed, as conditions depend upon the weather, the maturity of the product, the amount of moisture in the product, whether the products where gathered in the morning or in the afternoon, whether they are fresh or wilted, and whether they are large or small in size.

Circulation of Air Important

You must remember you can scarcely find two batches of vegetables and fruit exactly alike and this fact varies the time necessary to dry them. Much depends, also, upon the regularity with which the heat is applied. The main thing is to be sure there is enough air circulating or the vegetable will never get dry. The air must circulate freely.



Method of suspending three drying frames with rope harness

In using coal or wood for fuel, never take the lids off the stove. In using gas or coal oil, if there are lids on the stove remove them and always keep the flame as low as possible. You will be surprised at how low the flame can be used.

In drying any kind of products the same general process is followed, although the details may vary. But to maintain the original taste of the fruit or vegetable, drying should never be done at a higher temperature than 120 degrees Fahrenheit. All experiments have shown that if a greater heat is used, there is danger of burning the product and the delicate taste is sure to be destroyed.